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09/730,835	12/07/2000	Keng Tiong Tan	19441.0004	8724

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EXAMINER

TRAN, KHAI

ART UNIT PAPER NUMBER

2631

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/730,835

Applicant(s)

TAN, KENG TIONG

Examiner

KHAI TRAN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-122 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 88-110 is/are allowed.
- 6) ☒ Claim(s) 1-6, 22-26, 43-54, 58-62 and 76 is/are rejected.
- 7) ☒ Claim(s) 7-21, 27-42, 55-57, 63-75, 77-87 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 111-122 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 111, line 3, the term "a demodulation unit for modulating a signal" is not clear because the demodulation unit can not perform modulation of a signal.

Claims 112-122 are rejected by virtue of their dependency.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 1-42 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-42 of copending Application No. 09/712,135. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

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4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 and 22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of copending Application No. 09/970,768. Although the conflicting claims are not identical, they are not patentably distinct from each other because 09/970,768 discloses a number of additional elements that are not recited in the claims of the instant application. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to remove these additional components to reduce the complexity of the circuit. Claims 2-21 and 23-42 are rejected due to dependence on claims 1 and 22.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-6, 22-26, 43-47, 48-53, 54, 58, 59-61, 62, 76 are rejected under 35 U.S.C. 102(e) as being anticipated by Jedwab et al (U.S. Pat. 6,373,859).

Regarding claims 1, 6, Jedwab et al disclose a method for coding a code division multiple access signal based on Go-CDMA codes, comprising: providing majority coding blocks, each block comprising a Go-CDMA matrix; coding a data message based on the majority coding blocks (the block code with which data are encoded contains a sufficiently large number of different code words to enable a usefully high data transfer rate to be attained, the encoder 60 as shown in Fig.8, see col. 11, lines 17-21; and Jedwad et al further disclose in col. 4, lines 25-56, a step of encoding each data word in accordance with its value and code words selected in complete cosets, for desired peak-to-mean envelope power ratio characteristics of transmission, from a set one or more cosets of a linear sub-code of a code having generator matrix); and a step of

transmitting the code data message over a communication channel (a modulator 32/38 of the transmitter (TX) as shown in Fig. 6).

Regarding claims 2-5, Jedwab et al also disclose the majority coding blocks comprising a single coding stage, at least two or three coding stages, more than three coding stages (see col. 24, lines 10-67).

Claims 22-26 are similar to claims 1-5, Jedwab et al also disclose a decoder (54) for performing step of decoding a data message from the signal based on the majority coding blocks.

Claims 43-44, and 47 are similar to claims 1-5, and 22. Therefore, claims 43-44 and 47 are rejected under a similar rationale.

Regarding claims 45-46, Jedwab et al disclose that the method is executed at a mobile station and base station (see Fig. 1, comprising a mobile station (12) and a base station (10).

Claims 48-51 are similar to claims 1, 45-46. Therefore, claims 48-51 are rejected under a similar rationale.

Regarding claims 52-53, the claim 52 is similar to claim 1. Jedwab et al further disclose a step of scrambling the coded data message based on random codes (see col. 9, lines 11-38).

Claims 54, 58 are similar to claims 45-46. Therefore, claims 54 and 55 are rejected under a similar rationale.

Regarding claims 59-60, Jedwab et al disclose the data message being associated with different mobile units (see col. 8, lines 27-41).

Claim 61 is similar to claims 52-53. Therefore, claim 61 is rejected under a similar rationale.

Claim 62 is similar to claim 22, Jedwab et al also disclose a decoder (54) for performing step of decoding a data message based on the GO-CDMA codes.

Regarding claim 76 is similar to claim 62. Therefore, claim 76 is rejected under a similar rationale.

Allowable Subject Matter

8. Claims 66-75, 88-110 are allowed.
9. Claim 111 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
10. Claims 112-122 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
11. Claims 7-21, 27-42, 55-57, 63-65, 77-87 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Olafsson et al (U.S .Pat. 5,910,959) disclose a control channel for modems.

Giallorenzi et al (U.S .Pat. 6,091,760) disclose a non-re-cursively generated orthogonal PN codes for variable rate CDMA.

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Dent (U.S. Pat. 6,219,375) discloses a digital beam network.

Linskey et al (U.S. Pat. 6,279,132) disclose a concatenated error control method and system.

Johansson (U.S. Pat. 6,470,472) discloses an arrangements and method relating to transmission of digital data.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (703) 305-1876. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KHAI TRAN
Primary Examiner 6/23/04
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